



Certificate of Analysis

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Product Name: 2-ThioUTP tetrasodium salt Catalog No.: 3280 Batch No.: 12

CAS Number: 1343364-70-4

IUPAC Name: 2-Thiouridine 5'-triphosphate tetrasodium salt

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_9H_{11}N_2Na_4O_{14}P_3S$

Batch Molecular Weight: 588.13

Physical Appearance: Colourless liquid

Solubility: Soluble in water (supplied pre-dissolved at a concentration of 10mM)

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 98.6% purity **Mass Spectrum:** Consistent with structure

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Product Information

Print Date: Nov 18th 2024

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CAS Number: 1343364-70-4

IUPAC Name: 2-Thiouridine 5'-triphosphate tetrasodium salt

Description:

2-ThioUTP tetrasodium salt is a potent and selective $P2Y_2$ agonist (EC₅₀ values are 0.035, 0.35 and 1.5 μ M for hP2Y₂, hP2Y₄ and hP2Y₆ receptors respectively).

Physical and Chemical Properties:

Batch Molecular Formula: C₉H₁₁N₂Na₄O₁₄P₃S

Batch Molecular Weight: 588.13

Physical Appearance: Colourless liquid

Minimum Purity: ≥95%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

Soluble in water (supplied pre-dissolved at a concentration of 10mM)

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Ko et al (2008) Synthesis and potency of novel uracil nucleotides and derivatives as P2Y₂ and P2Y₆ receptor agonists. Bioorg.Med.Chem. **16** 6319. PMID: 18514530.

El-Tayeb *et al* (2006) Synthesis and structure-activity relationships of uracil nucleotide derivatives and analogues as agonists at human P2Y₂, P2Y₄ and P2Y₆ receptors. J.Med.Chem. **49** 7076. PMID: 17125260.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use